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Goat Anti-Nur77 / TR3 (isoform a) Antibody

Peptide-affinity purified goat antibody
Catalog # AF1749a

Specification

Goat Anti-Nur77 / TR3 (isoform a) Antibody - Product Information

Application	**WB, E**
Primary Accession	P22736
Other Accession	NP_775180, 3164, 15370 (mouse), 79240 (rat)
Reactivity	**Human**
Predicted	**Mouse, Rat, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**64463**

Goat Anti-Nur77 / TR3 (isoform a) Antibody - Additional Information

Gene ID 3164

Other Names
Nuclear receptor subfamily 4 group A member 1, Early response protein NAK1, Nuclear hormone receptor NUR/77, Nur77, Orphan nuclear receptor HMR, Orphan nuclear receptor TR3, ST-59, Testicular receptor 3, NR4A1, GFRP1, HMR, NAK1

Dilution
WB~~1:1000
E~~N/A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-Nur77 / TR3 (isoform a) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-Nur77 / TR3 (isoform a) Antibody - Protein Information

Name NR4A1

Synonyms GFRP1, HMR, NAK1

Function
Orphan nuclear receptor. Binds the NGFI-B response element (NBRE) 5'-AAAGGTCA-3' (PubMed:18690216, PubMed:8121493, PubMed:9315652). Binds 9-cis-retinoic acid outside of its ligand- binding (NR LBD) domain (PubMed:18690216). Participates in energy homeostasis by sequestrating the kinase STK11 in the nucleus, thereby attenuating cytoplasmic AMPK activation (PubMed:22983157). Regulates the inflammatory response in macrophages by regulating metabolic adaptations during inflammation, including repressing the transcription of genes involved in the citric acid cycle (TCA) (By similarity). Inhibits NF-kappa-B signaling by binding to low-affinity NF-kappa-B binding sites, such as at the IL2 promoter (PubMed:15466594). May act concomitantly with NR4A2 in regulating the expression of delayed-early genes during liver regeneration (By similarity). Plays a role in the vascular response to injury (By similarity).

Cellular Location
Nucleus. Cytoplasm, cytosol. Mitochondrion Note=Nuclear export to the cytosol is XPO1-mediated and positively regulated by IFI27 (PubMed:22427340). Translocation to the mitochondrion upon interaction with RXRA and upon the presence of 9-cis retinoic acid (PubMed:17761950).

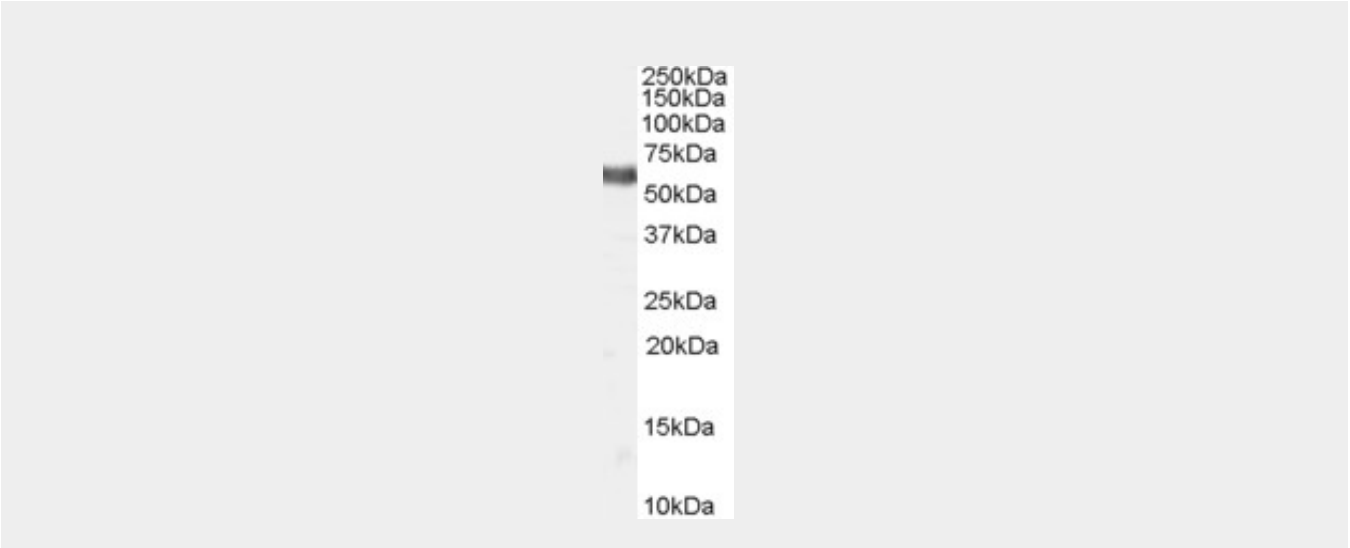
Tissue Location
Fetal muscle and adult liver, brain and thyroid.

Goat Anti-Nur77 / TR3 (isoform a) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-Nur77 / TR3 (isoform a) Antibody - Images



AF1749a (2 µg/ml) staining of Human Thyroid lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-Nur77 / TR3 (isoform a) Antibody - Background

This gene encodes a member of the steroid-thyroid hormone-retinoid receptor superfamily. Expression is induced by phytohemagglutinin in human lymphocytes and by serum stimulation of arrested fibroblasts. The encoded protein acts as a nuclear transcription factor. Translocation of the protein from the nucleus to mitochondria induces apoptosis. Multiple alternatively spliced variants, encoding the same protein, have been identified.

Goat Anti-Nur77 / TR3 (isoform a) Antibody - References

An approach based on a genome-wide association study reveals candidate loci for narcolepsy. Shimada M, et al. Hum Genet, 2010 Oct. PMID 20677014.
Replicated association of the NR4A3 gene with smoking behavior in schizophrenia and in bipolar disorder. Novak G, et al. Genes Brain Behav, 2010 Jul 24. PMID 20659174.
Deficiency of the NR4A orphan nuclear receptor NOR1 decreases monocyte adhesion and atherosclerosis. Zhao Y, et al. Circ Res, 2010 Aug 20. PMID 20558821.
No association between variation in the NR4A1 gene locus and metabolic traits in white subjects at increased risk for type 2 diabetes. M□ssig K, et al. BMC Med Genet, 2010 Jun 4. PMID 20525362.
Regulation of Nur77 protein turnover through acetylation and deacetylation induced by p300 and HDAC1. Kang SA, et al. Biochem Pharmacol, 2010 Sep 15. PMID 20438716.